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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

ART UNIT	PAPER NUMBER
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12

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09 004,395

Applicant

GILMORE ET AL

Examiner

N. M. Minnifield

Group Art Unit

1645



Responsive to communication(s) filed on _____

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 14-18 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- Claim(s) _____ is/are allowed.
- ☒ Claim(s) 14-18 is/are rejected.
- Claim(s) _____ is/are objected to.
- Claims _____ are subject to restriction or election requirement.

Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- The drawing(s) filed on _____ is/are objected to by the Examiner.
- The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- The specification is objected to by the Examiner.
- The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All ☐ Some ☐ None ☐ of the CERTIFIED copies of the priority documents have been received.

received in Application No. (Series Code Serial Number) _____

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of Publication, PTO 800

Notwithstanding to Patent Application No. _____

SEE OFFICE ACTION ON THE FOLLOWING PAGES

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DETAILED ACTION

1. Applicant's election without traverse of Group III, claims 14-18, in Paper No. 4 is acknowledged.
2. Applicants' amendment filed January 11, 1999 is acknowledged and has been entered. Claims 1-13 have been canceled. Claims 14-18 are now pending in the present application.
3. Please note that the amendment to sequences and sequence disk that was filed on June 9, 1999 has been entered into the specification and processed by STIC Systems Branch. However, the following correction was made by STIC Systems Branch: deleted non-ASCII "garbage" at the end of files.
4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a

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5. Claims 14-18 are rejected under 35 U.S.C. 102(a) as being anticipated by Ge et al, 1997 (J. Bacteriology; Infection and Immunity).

The claims (product by process) are directed to a recombinant FlaA protein; the protein has a defined amino acid sequence. The claims also set forth a fusion protein and that the transformed host in the recombinant process is *E. coli*.

Ge et al (J. Bacteriology, 1997) disclose a flagellin protein, FlaA, from *B. burgdorferi* having a molecular weight of 38 kD (abstract; p. 552). A lysate of *B. burgdorferi* showed strong reactivity to a protein of 38.0 kDa, which is consistent with the expression of *flaA* in growing cells (abstract). Ge et al disclose the protein sequence of the FlaA protein (Figure 1) and that the *B. burgdorferi* FlaA homolog contains a typical signal sequence at its N terminus including a positively charged N-terminal domain, a central hydrophobic segment and a signal peptidase I cleavage site; after cleavage the mature protein has a molecular weight of 36 kD (p. 553). Western blot analysis of cell lysates of *B. burgdorferi* indicate that a single band of approximately 38.0 kD reacted with antiserum (figure 5; p. 555).

Ge et al (Infection and Immunity, 1997) disclose recombinant FlaA protein from *B. burgdorferi* (abstract). Ge et al disclose the cloning of *flaA* into expression vectors using *E. coli* and produces expression of the recombinant FlaA

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2993). Ge et al disclose that the molecular weight is 38 kD (p. 2993). Figure 1 shows the amino acid sequence of the protein.

The prior art anticipates the claimed invention.

6. No claims are allowed.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to N. M. Minnifield whose telephone number is (703) 305-3394. The examiner can normally be reached on Monday-Thursday from 7:00 AM-4:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Caputa, Ph.D., can be reached on (703) 308-3995. The fax phone number for this Group is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)

August 26, 1999


N. M. MINNIFIELD
UNIT 1645